

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Chaoxin C. Qiu et al.

Filed: Concurrently Herewith

For: SYSTEMS AND METHODS FOR RESOURCE MONITORING IN INFORMATION
STORAGE ENVIRONMENTS

Serial No.: Unknown

Prior Group Art Unit: Unknown

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Assistant Commissioner For Patents
Washington, D.C. 20231

Dear Sir:

PRELIMINARY AMENDMENT TO REDUCE FILING FEES

Please amend the application as follows.

In the specification:

The rewritten clean versions of all the specification changes are provided below.
Attached at the end of this paper is an Appendix providing an indication of the changes relative
to the prior version of the specification, as now required by Rule 121.

Please replace the paragraph from page 1, lines 1-5 with the following:

009045-10650

Patent Application for
**“SYSTEMS AND METHODS FOR RESOURCE MONITORING IN INFORMATION
STORAGE ENVIRONMENTS”**

Inventors: Chaoxin C. Qiu, Umesh Gupta, Scott C. Johnson, Sarma Kolavasi, Theodore S.
Webb, Richard W. Yu, and Mark J. Conrad

Please replace the paragraph from page 1, line 7 to page 2, line 5 with the following:

This application is a continuation of Application Serial No. 09/947,869, which was filed September 6, 2001 and is entitled “SYSTEMS AND METHODS FOR RESOURCE MANAGEMENT IN INFORMATION STORAGE ENVIRONMENTS”, which in turn claims priority from co-pending United States Patent Application Serial Number 09/879,810 filed on June 12, 2001 which is entitled “SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN INFORMATION MANAGEMENT ENVIRONMENTS,” and also claims priority from co-pending Provisional Application Serial No. 60/285,211 filed on April 20, 2001 which is entitled “SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN A NETWORK ENVIRONMENT,” and also claims priority from co-pending Provisional Application Serial No. 60/291,073 filed on May 15, 2001 which is entitled “SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN A NETWORK ENVIRONMENT,” the disclosures of each of the forgoing applications being incorporated herein by reference. This application also claims priority from co-pending United States Patent Application Serial No. 09/797,198 filed on March 1, 2001 which is entitled “SYSTEMS AND METHODS FOR MANAGEMENT OF MEMORY,” and also claims priority from co-pending United States Patent Application Serial No. 09/797,201 filed on March 1, 2001 which is entitled “SYSTEMS AND METHODS FOR MANAGEMENT OF MEMORY IN INFORMATION DELIVERY ENVIRONMENTS,” and also claims priority from co-pending Provisional Application Serial No. 60/246,445 filed on November 7, 2000 which is entitled “SYSTEMS AND METHODS FOR PROVIDING EFFICIENT USE OF MEMORY FOR NETWORK SYSTEMS,” and also claims priority from co-pending Provisional Application Serial No. 60/246,359 filed on November 7, 2000 which is entitled “CACHING ALGORITHM

FOR MULTIMEDIA SERVERS,” the disclosures of each of the forgoing applications being incorporated herein by reference. This application also claims priority from co-pending United States Patent Application Serial Number 09/797,200 filed on March 1, 2001 which is entitled “SYSTEMS AND METHODS FOR THE DETERMINISTIC MANAGEMENT OF INFORMATION” which itself claims priority from Provisional Application Serial No. 60/187,211 filed on March 3, 2000 which is entitled “SYSTEM AND APPARATUS FOR INCREASING FILE SERVER BANDWIDTH,” the disclosures of each of the forgoing applications being incorporated herein by reference. This application also claims priority from co-pending Provisional Application Serial No. 60/246,401 filed on November 7, 2000 which is entitled “SYSTEM AND METHOD FOR THE DETERMINISTIC DELIVERY OF DATA AND SERVICES,” the disclosure of which is incorporated herein by reference.

Please replace the paragraph from page 49, lines 16-21 with the following:

In yet other embodiments, cycle time may be modified or limited based on a number of factors. For example cycle time may be limited or capped by limiting read-ahead buffer size, for example, using Resource Model Equations (17B), (18B) or (19B). Cycle time may also be limited or capped by placing a set limit on the maximal buffer size (*e.g.*, by placing a 2MB limit on the maximal buffer size in a case where system throughput does not increase, or does not increase significantly, with any increase in the buffer size beyond 2MB).

In the claims:

Please cancel claims 1-175 and add the following new claims:

176. A method of modeling utilization of one or more I/O resources in an information delivery environment, comprising monitoring one or more system I/O performance characteristics associated with said I/O resources, and modeling utilization of one or more of said I/O resources based at least in part on said monitored I/O system performance characteristics.